

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SOON S. SHIM

Appeal No. 1996-4065
Application 08/234,115¹

ON BRIEF

Before JERRY SMITH, BARRETT, and HECKER, Administrative Patent Judges.

HECKER, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed April 28, 1994.

This is a decision on appeal from the final rejection of claims 5 through 8. Claims 1 through 4 and 9 were canceled by an amendment after final rejection, paper no. 12, and the limitations of claim 1 were inserted into claim 5.

The invention relates to a remote controller for controlling the operation of electronic products, such as household electronic appliances. More particularly, the remote controller has a keyboard with single function keys and plural function keys. When a key is actuated, it is determined if the actuated key is a plural function key or a single function key. If a plural function key has been actuated, first data is transmitted which controls an operation of a first appliance and second data is transmitted following the transmission of the first data to control another operation of a second appliance. For example, pressing one key of the remote controller could cause data to be transmitted which would first turn on the power to a VCR and then select a channel of a television. This eliminates the need for pressing two or more keys to achieve these

separate functions.

Representative independent claim 5 is reproduced as follows:

5. A method for remotely controlling operations of at least two different apparatus from a remote controller having a keyboard with keys that are depressed to initiate data instructions that are transmitted to said apparatus, said method comprising:

actuating on said keyboard a key assigned for the control of at least two consecutive operations of said at least two different apparatus;

detecting the actuation of said key assigned for the control of at least two consecutive operations; and

in response to said detection of said key, transmitting consecutively to said at least two apparatus at least two preset data instructions limited to product signal formats corresponding to said at least two apparatus, said data instructions being received by each of said at least two apparatus to control different operations in at least two of said apparatus, wherein some keys (single function keys) on said keyboard are preassigned to result in single data instructions being generated and transmitted by said remote controller and other keys (plural function keys) on said keyboard are preassigned to result in plural data instructions being generated and transmitted by said remote controller, and wherein the step of detecting the actuation comprises:

detecting whether or not any key on said

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keyboard is actuated;

in response to detection of actuation of a key
in said last step, buffering a data instruction preassigned to
the actuated key;

determining if the actuated key is a plural
function key; and

in response to determining that said activated
key is a plural function key, buffering successive data
instructions preassigned to said actuated plural function key
so that said at least two preset data instructions are read
from said buffer during the transmitting step.

The Examiner relies on the following references:

Evans et al.	4,825,200	Apr. 25, 1989
Smith	4,857,898	Aug. 15, 1989
Enomoto et al.	5,128,667	Jul. 7,
1992		
Lee et al.	5,212,487	May 18, 1993
	(filed Sep. 6, 1991)	
Lee et al. ²	DE 4128907 A1	Nov. 5, 1992

² Since the date of the U.S. Patent to Lee et al. is
sufficient and the record states the disclosures are
equivalent, we will rely on the content of the U.S. Patent for
this decision.

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Claims 5 through 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lee et al. in view of Enomoto et al. and what was well known in the remote controller art, and claims 5 through 8 also stand rejected under 35 U.S.C. § 103 as being unpatentable over Evans et al., Enomoto et al. and Smith.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the brief, reply brief and answer for the respective details thereof.

OPINION

After a careful review of the evidence before us, we will not sustain the rejection of claims 5 through 8 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. In re

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Sernaker, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

"Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." Para-Ordnance Mfg. v. SGS Importers Int'l, Inc., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995) citing W. L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With regard to the rejection of claims 5 through 8 under 35 U.S.C. § 103 as being unpatentable over Lee et al., Enomoto et al and what was known in the prior art, Appellant argues:

One reason for this is that the references fail to teach or even suggest Appellant's most basic claimed arrangement: that of providing some keys as single function keys and other keys as plural function keys which are pre-assigned to result in plural data instructions being generated and transmitted by the remote controller. (Brief-page 5.)

The two preset data instructions are defined at

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lines 13-15 [of claim 5] as controlling different operations in at least two apparatus. (Reply brief-page 2.)

The Examiner responds:

Regarding Appellant's limitation that operations for different equipments are controlled, the Examiner notes that Lee specifically suggests that different equipments and commands for each equipment can be transmitted, see Figure 3B and Figure 5, items 204-206 as well as column 3, lines 44-51 and column 6, lines 17-30 of US 5,212,487. Note that Lee discloses storing product codes for different products and outputting them sequentially so "that a variety of electric appliances can be simultaneously controlled." (Answer-page 9.)

We fail to find any support in the Examiner's citations for the controlling of **different operations** in at least two apparatus as claimed. Lee controls the **same operation** for different products simultaneously.

Appellant argues:

Additionally, neither of the applied references teaches or suggests the feature of determining if the actuated key is a plural function key as required by Claim 5. (Brief-page 5.)

The Examiner responds:

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Regarding the limitation of determining whether the activated key is a plural function key, Enomoto is suggestive of this feature (in addition to the other references). See Figure 4, item 104, where the activated key is checked and set to the proper response command. Further, Lee teaches that at least one control command is assigned to a given key, thereby implying that some keys may have a single command function transmitted in response to their respective activation in addition to some keys causing the transmission of two, or more, commands when depressed. (Answer-pages 9 and 10.)

Reviewing the Examiner's citations supra, we see no "determining if the actuated key is a plural function key" as claimed. Figure 4, item 104, of Enomoto "sets the key data to the proper response command", column 7, line 14. And, the "implication" in Lee that some keys have a single command and some keys have two or more commands, does not teach the "determining" step.

Therefore, as to the rejection of claims 5 through 8 using the Lee and Enomoto combination, we find they lack the required limitations of claim 5, and we will not sustain this rejection.

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With regard to the rejection of claims 5 through 8 under 35 U.S.C. § 103 as being unpatentable over Evans et al., Enomoto et al. and Smith, Appellant argues:

The remote controller of Evans et al. is also capable of being programmed to cause a predetermined sequence of steps to be performed in conjunction with one or more devices (column 8, lines 16-21). ...

As described above, Evans et al. requires the activation of two keys to achieve control of more than one device. (Brief-pages 9 and 10.)

Reviewing Evans at column 8, lines 5 et seq., we note that Evans does in fact "control different operations in at least two of said apparatus" as claimed, but uses two keys. However, the first key, preset key 46, only indicates that the next key will be a pre-programmed key. When the pre-programmed key is actuated, the claimed operations are performed. Appellant's claim does not recite a "single" key, and does not preclude using a preset key first. In a similar manner, if key 40 were in the learn mode, it would have to be actuated to obtain the run mode. Thus Appellant might argue that three keys may have to be actuated to perform the plural operations, i.e. key 40 (to obtain the run mode), then key 46 (to indicate

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a pre-programmed mode) and then the "single" key that when activated will "control different operations in at least two of said apparatus" as claimed. We find that Evans meets the recited claim language.

Appellant further argues:

In particular, Appellant submits that neither Evans, Enomoto nor Smith teaches or suggests the features recited in Claim 5 wherein some keys on the keyboard are single function keys, some keys are plural function keys, **and a determination is made if an actuated key is a plural function key.** (Emphasis added.) (Brief-page 8.)

The Examiner responds:

Regarding Appellant's argument that Smith does not teach distinguishing between single and plural function keys, this feature is taught by both Evans and Enomoto in the combination of the references applied in the rejection. (Answer-page 10.)

Although the Examiner has shown the use of plural function keys in Evans and Enomoto, there is no evidence proffered, nor can we find a teaching, of a method step of "determining if the actuated key is a plural function key" as claimed in claim 5. Thus we will not sustain the rejection of claims 5 through 8 using the Evans, Enomoto and Smith

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combination.

We have not sustained the rejection of claims 5 through 8 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

REVERSED

	Jerry Smith)	
	Administrative Patent Judge)	
)	
)	
)	BOARD OF
)	
	Lee E. Barrett)	PATENT
	Administrative Patent Judge)	
)	APPEALS AND
)	
)	
INTERFERENCES			
	Stuart N. Hecker)	
	Administrative Patent Judge)	

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SH/dm

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